

More University Education Needed for New Zealand

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There was a Professor of Oxford University, who at the beginning of his course would say to his students: 'Gentlemen, you are about to embark on a course of studies, which will occupy you for three years. Together they will form a noble adventure. But I would like to remind you of an important point. When you go down from the University, you will go into the church or to the bar or to parliament or into the army or into industry or commerce or into various other professions. Let me make this clear to you: nothing you will learn in the course of your studies here will be of the slightest use to you in later life, save only this: that if you work hard and intelligently, you should be able to detect when a man is talking rubbish – and that is the main purpose of a university education.'

Well, that was one hundred years ago and a lot has changed. First, professors don't address the students as 'gentlemen' any more, not only because of our gender-inclusive language, but mainly because today over sixty percent of university students are women. Second, most students now expect their university education to fit them for their professions and to cover many of the specifics required. The courses offered at universities meet those expectations and university education is more and more relevant to the world of work and enterprise. When our Oxford professor was talking, a university education was liberal. Mostly, except for medicine or the church, you learned your profession when you left university, on the job.

Nowadays, the professional practitioners, on whom our increasingly complex society relies, come well prepared from university education. Teachers, nurses, doctors, dentists, other health professionals, engineers, designers, lawyers, interpreters, accountants, professional managers, marketers, journalists, writers and commentators, filmmakers, communicators, scientists and technologists, scientific and medical technicians, information specialists, architects, analysts of many kinds, planners, economists, social workers, finance specialists, agriculture and horticulture experts, the list goes on: these are how we see university graduates now. Specific courses for all of these careers are available in New Zealand universities – as they are throughout the world - with many reviewed and accredited by professional bodies.

Nevertheless, there persists a belief that universities are of the kind I described at the beginning: aloof, rarefied, and unconcerned with their relevance and connection to society: the kind of thing that it is nice for a country to have but is only vaguely necessary. I suspect that many influencers and decision-makers have such a view of the ivory tower and the ivy-clad halls of academe. Yet the growing number of graduates in New Zealand and many other parts of the world will not have experienced a university anything like that.

As to whether a university education will enable one 'to detect when a man is talking rubbish': that should make me a little anxious. I imagine that many of you listening to me have completed a university education because what was once a rare thing – as having gone to university was one hundred years ago and even much more recently - has now become almost ordinary. When I went to university, only about five percent of my school cohort would have joined me; only a small minority would have even obtained the necessary qualifications under the school system then. Otago University, where I studied, had about 4000 students. Now, thirty years later, over 25% of school leavers go on to university, and Otago has about 20,000 students. All the other universities have grown by similar proportions, and there is another in the mix as well: AUT University, now just ten years old, which also has about 20,000 students.

By some estimates, there are more than 8000 universities spread around the globe. While some, like Bologna, Oxford, and Paris are ancient, and others like Harvard and Columbia are very old, many have been established recently, within the last fifty years – even the last twenty years. Why has university education flourished so prolifically that thousands of universities can attract sufficient students each year to be sustainable? Some reasons are obvious. Population growth and the development in the third world are two. On top of that, the developed world is more and more complex. Knowledge is deeper, wider, more accessible, and more obvious in the public sphere. Technological development shifts labour from manual work to brain-work and from struggling to meet basic needs to those of individual development and personal achievement. With this, has been a shift in society's standards. Professions prefer university qualifications for their entry-level practitioners. Accountants in New Zealand used to be mainly qualified through the ACA exams at night school

or polytechnic; now, it is with a degree. Nurses or journalists used to get diplomas; now, they get degrees. Engineering technicians once took the New Zealand Certificate in Engineering, but now take a Bachelor of Engineering Technology.

The escalation of professional qualifications in New Zealand has in part been a response to international pressures as registration bodies have sought to establish or preserve parity with overseas counterparts for whom degrees were already the standard. Partly, it has been due to a more widespread 'credentialism'. People think they need better qualifications to compete for the better jobs they want; professions don't want to be the one with lesser entry standards and therefore status. And there is a notion that a university education is a good thing – a notion entertained by more and more people for more and more people.

In fact, that notion seems to be correct. Degree graduates do better on average. They earn more. According to studies cited by the Ministry of Education in 2008, New Zealand graduates are paid considerably more than those with no qualifications and the margin increases over their working lives; they also earn much more than any other qualifications group, whether secondary school qualifications, trade, pre or sub-degree diplomas and certificates. In Australia, it is estimated that on average a graduate's life-time earnings will be one and half million dollars more than a school leaver with no other qualifications, and three quarters of a million dollars more than a person with trade or vocational qualifications.

Degree graduates are less likely to be unemployed. According to the Statistics NZ Labour Force Surveys over the years 2001 to 2006, years of generally low unemployment anyway, degree graduates were two to three times less likely to be unemployed than the unqualified and less likely to be unemployed than any other qualifications group.

Degree graduates are also less likely to be convicted of a crime or imprisoned (despite recent high profile cases) as well as being less likely to be seriously ill or to die before attaining the average life span. Moreover, graduates pass the benefits down the generations so that their children are more likely to complete secondary school and take up tertiary studies than others.

On top of – or because of - these individual benefits, degree graduates are associated in high numbers with peaceful and prosperous societies, such as those in Europe, America or Japan. This is why a rapidly developing country such as China is investing hugely in establishing new universities, currently at the rate of dozens a year. If university education is good for the whole economy and society it serves, New Zealand might need to take it further than it has. We need more people who are degree graduates. Of course, I would say that, but not only university leaders think so. The NZ Treasury specifically pointed it out in its advice to the incoming government last year.

Nevertheless, you might still ask:

- Do we have too many people going into university and not enough going on to other forms of tertiary education – such as trade and vocational training?
- Have we overshot with our rapid rise in national university attendance rates?
- Don't many of our graduates go overseas anyway?
- If New Zealand now has eight universities, is that too many competing for a small pool of students with wasteful duplication of courses?

Beginning with that last question – one often put to me as a representative of the most recently established university. In answering it, we might consider how New Zealand compares with other nations. With over four million people and eight universities, we have about one for every half a million people. Australia with about twenty million people has thirty-nine universities or one for every half a million people or so – the same as New Zealand has. That is similar for countries from the UK to Fiji. What about our city of Auckland, which now has the University of Auckland, AUT University, and a campus of Massey University up at Albany – is that too many? Brisbane, a similar size to Auckland, has three big universities and a number of institutes of technology – what we might call polytechnics. On top of that, there are several more universities in Queensland throughout the state – just as we have in New Zealand. Adelaide and Perth, which also have similar populations, have three or more universities each – not to mention the much larger Sydney or Melbourne with six or seven each. On a comparative basis, New Zealand is not over-supplied with universities.

As for unnecessary competition and wasteful duplication of courses in a small market: according to the Tertiary Education Commission and the government's Tertiary Advisory Monitoring Unit it is, unfortunately, the ITP sector (the institutes of technology and polytechnics) for which the sustainability of provision and the number of institutes throughout the country is a worry. That is why government is reviewing governance for that sector. But there is little concern about the sustainability of finances or enrolments for the university sector – at least not in Wellington.

Nevertheless, the question remains have we overdone the selling of our universities? Do we have too many people going to university? If we look at the proportion of the population with a degree-level qualification (See Annex One) we find that:

- New Zealand is seventeenth out of thirty of the OECD countries.
- Behind us are countries like the Slovak and the Czech Republics, Mexico, Turkey, Greece, Hungary and Portugal.
- Ahead of New Zealand are the Northern European countries, there are Japan and Korea, and the English-speaking countries - Canada, UK, USA, Ireland - pretty much everyone with whom we might wish to compare ourselves, and most notably Australia.
- Australia ranks ninth in the OECD league, well ahead of New Zealand.
- In 2005 Australia had 31% of its population with a degree-level qualification and New Zealand had just 27%.

That 4% gap might seem a small difference, but if New Zealand matched Australia's percentage, it would mean about 100,000 more degree-qualified people here. That is staggering number of people in terms of our ability to compete internationally.

But whatever the absolute numbers, are too many people going to university relative to those seeking trade and vocational qualifications? It is important to establish this balance; as someone has observed, 'we need our pipes to hold water as much as our theories'. Looking at the equivalent comparisons for trade or vocational qualifications we find that:

- New Zealand ranks eleventh out of the thirty countries, and is very close to Denmark, Sweden, US and UK – we are in good company.
- New Zealand is well ahead of many countries with higher GDP per capita – and interestingly will ahead of Australia.
- Australia ranks only 27th out of the thirty compared to New Zealand's eleventh.
- In 2005, New Zealand had more than half of the population with a trade or vocational qualification compared with just one third in Australia.

New Zealand seems to be in a strong position with trades and vocationally qualified people, but much worse off for degree qualifications, which is the opposite way around to the position I often hear aired by commentators.

One could make various arguments to explain away these statistics or their significance. One might note that New Zealand has an aging population with a high proportion of older people who – as was common in those days – never went to university. However, Australia, all the other OECD English-speaking countries, Japan, and Northern Europe all have even older populations than New Zealand. Age profiles do not explain the qualifications differences we see.

You could argue that New Zealand does not need all the degree graduates that it produces anyway. Many of them go overseas to get work. True, but we also have real shortages of degree-level professionals such as engineers, accountants, teachers, dental health practitioners, midwives; we lack well-prepared and educated managers and executives to lead and support our businesses. In fact, we import more graduates than we export. Even if all the degree graduates from New Zealand universities and polytechnics stayed here, we still would not have enough. We bring in surgical registrars from India. We bring in nurses from the Philippines. Over the last few years, more nurses registered in New Zealand with overseas qualifications than with New Zealand qualifications. In the Auckland region alone within the last five years, there were 48,000 new jobs in the 'highly skilled category', almost all requiring a university graduate. In the 'semi-skilled category' there were

only half that number and in the 'low-skilled' less than a quarter. The growth areas in the employment market are hungry for degree graduates.

You might argue that the other countries are more affluent and better placed to provide their people with opportunities to obtain degrees. As a Kiwi myself, I do not want to accept that New Zealand should be, or is generally happy to be, relegated to the less educated ranks of the developed nations. New Zealand has a proud educational record at primary and secondary level. It has been a nation that until recently has made university and polytechnic access open to all who would benefit from it and desired to take it up.

Furthermore, it is likely that higher education is as much a driver of economic prosperity as it is an indicator of it. As well as providing skills, capability, and the intellectual and human capital needed for economic growth in the world today, higher education builds economic aspiration in a society. How much of a nation's wealth is the result of each individual's desire and sense of what is possible for him or her to achieve? We know higher education is transformative for individuals; it is likely that it is for the societies and economies within which it occurs as well – and there are economic studies suggesting that this is the case.

So what has been happening in New Zealand in the tertiary education scene (according to statistics from the Ministry of Education)?

- Over the decade to 2005, the participation rate in universities went down.
- Adding in polytechnic degree courses the participation rate in degree education still went down.
- However, the participation rate in trade and vocational courses - where New Zealand now ranks relatively highly in the OCED – went way up, increasing by more than 50%.
- Because of these increases, total participation in all levels of tertiary education soared from 10.5% to 14.0%, government spend going with it.

The Labour-led government responded to the situation three years ago by stopping more people getting into tertiary education. This unfortunately included university education, which needed a boost if anything, certainly not restraint – it had had a decreasing participation rate. Nevertheless, an across-the-board one-size-fits-all approach, with funding limits and caps on the number of student places, was what we got.

I am sure we are all familiar with the disaffection expressed by both major political parties with the so-called 'bums on seats' funding model (or 'EFTS funding' as it was officially known) for tertiary education that the new arrangements of capped funding replaced. The National government of the late nineties introduced the EFTS funding model as a modification of an earlier version launched by the fourth Labour government. EFTS funding was essentially a market model for tertiary education. It responded to demand, and gave institutions money for student tuition only for the students they attracted. Those elements seem good. The main charge against the model was that it gave rise to 'Twilight Golf', 'Cool IT', 'Sing Along on the Radio', and other dubious offerings from several polytechnics that enrolled thousands of apparent students. It is important to understand that the problem that produced these undesirable anomalies and rorts was not, in and of itself, a system with market style incentives to attract students. It was almost entirely due to a lack of quality control at some points in the system. The Tertiary Education Commission identified that problem and, in the last years of the 'bums on seats' model, plugged the gap. The government saved more than \$100 million dollars per year of tertiary funding as a direct result. No new funding system was required to fix any other real anomalies. Nevertheless, we still got the centrally controlled and capped system that operates today, and with it, we got higher administration and compliance costs.

The unfortunate reality of the capped system has only just become apparent this year. It is unresponsive and unsophisticated. Now, we look forward to queues of qualified applicants at the closed doors of universities and polytechnics. Now, young people who have followed the strong messages that society, the government, the education system, their teachers, and their parents have given them to stay on at school, work hard, be successful and obtain the University Entrance qualifications might have to be told, 'Sorry. You won't get in to a university because they are all over-enrolled to the maximum the government will allow.' I don't know if any of us can really understand what this means until it is our son or daughter who has succeeded at school and is then declined on the grounds of a lack of places in any course at university. The capped system represents a rupture in the education pathway. Government funds secondary education according to enrolment numbers – even enrolments past the minimum leaving age for compulsory schooling. Once in tertiary, the numbers of

places for enrolment are subject to an arbitrary cap that, as we have seen this year, need bear no relationship to what is happening at the secondary level in the education pathway.

Curiously, in an opposite move to New Zealand's, Australia, which had a capped university funding model, is now moving to correct their system with a model that funds every enrolment – as New Zealand used to do under EFTS funding ('bums on seats'). Yet our government has committed to retaining the capped system it inherited from the previous government and has said in its recent budget statement that it would be 'maintaining, rather than reducing, the level of university provision that we have had'. Maintaining is better than reducing but is it enough? Four factors suggest not:

- First, the years 2006 to 2008 – where capping numbers and 'maintaining' levels of provision freezes the system - saw a lower rate of participation in degree education than at any other time in the decade.
- Second, as we have seen, New Zealand's competitors and counterparts in the world are already more qualified at degree level.
- Third, the global financial situation has closed off the alternative of employment from thousands of young people. Many thousands of those are already apparent in Auckland.
- Fourth, Maori and Pacific Islanders have quite a catch-up to do as universities work to make themselves more accessible to these large and fundamentally important New Zealand communities. Rob MacLeod, as Chair of the Business Roundtable, has pointed out that if you took all those Maori who live on social welfare and all those who are disproportionately clustered in low wage jobs and moved them into employment commensurate with their potential, ability, and aspirations, the positive impact on the economy would be in billions – he says, 'forty Treaty settlement fiscal envelopes'. University education would have an important role to play in making that positive and fundamental shift in New Zealand's fortunes, and Maori are making progress in taking hold of the opportunities that universities offer. It would seem inopportune to close the door against that move.

I must accept that we are in an economic recession with many demands on a shrunken government purse. However, as a citizen as well as a Vice Chancellor, I would like my country to be one where government spent our money on improving the development of our young people for economic recovery and growth as a high priority and not as the least – which seems to be the present case. The quality of our young is the quality of our future. I would like the government to invest more, and more wisely, in that future.

Despite the economic crisis – in fact because of it – and despite the fact that they are already ahead in the degree-graduate-stakes, the Australians, the Americans, and the British are investing more in universities. The British have recently opened up 10,000 extra university places to cope with the surge of enrolments, with which the capped enrolment system that they introduced last year could not cope. The huge new investment that Australia has announced for its universities is expected to return an average of \$1.6 billion annually over the next decade from a consequential increase in GDP.

Similar investment in New Zealand universities would be no waste, and undoubtedly would have the same benefits that other countries are aiming for, those being: 1) an active response to the financial crisis with its higher unemployment and tighter more competitive global market; and, 2) national economic gains. Whatever universities can contribute in other countries, they can achieve just as well here.

- New Zealand universities are of a consistently high standard. The PBRF (Performance Based Research Fund) assessment of university quality based on their research records shows little difference between the New Zealand universities – allowing for the very new AUT University and the very small and focussed Lincoln University.
- International rankings place several New Zealand universities in the top few hundred of the thousands in the world. One of the two main rankings has the University of Auckland consistently in the top sixty five universities (Times Higher Education Supplement World University Rankings, 2008) along with the world's best known and most highly regarded universities, such as Harvard, Stanford, MIT, Berkeley, Melbourne, Sydney, NYU, Tokyo, Oxford, Cambridge, Edinburgh, LSE, Chicago, Singapore National University, the Sorbonne, Toronto, Peking, Heidelberg, etc.
- New Zealand university graduates are well regarded overseas and sought after as employees – indicating the quality of our educational standards.

- New Zealand universities are efficient. On a purchasing-power-parity basis, Australian universities receive forty percent more per student from government than New Zealand universities do. Yet, the New Zealand university system still performs strongly with its services, outputs and outcomes.

Moreover, universities contribute to the economy in other ways than through education, with their research, employment and export earnings. The universities are the biggest research grouping in the New Zealand economy, greater than the Crown Research Institutes or industry. Overall, the New Zealand universities employ around 18,000 people with sixty percent of their annual spend going to personnel. As well, by buying goods and services worth hundreds of millions of dollars from New Zealand firms each year, the universities significantly support employment elsewhere in the economy. Added to that, the universities bring in almost one billion dollars of export earnings each year from international students in tuition fees, accommodation and living expenses. From a purely business perspective, it would seem as valuable for government to invest in university expansion and infrastructure as in many other sectors; and, on top of that are the economic and social benefits that advanced education itself provides.

It is worth noting that on average only about forty percent of university income comes directly from government grants; the rest is from the private sector in student fees, research commissions and contracts, consultancy and trading. But the government substantially controls the student-based income by 1) limiting the price universities can charge New Zealanders for student fees, and 2) limiting the number of New Zealand students each university can admit – whether funded by tuition grants from government or not. It is the government and not the universities that will decide how many students will receive higher education in New Zealand – and ultimately, through its funding and student fee controls, what the quality of that education will be.

In all of this, what is AUT University doing? We are getting on with the job of providing education and research for our communities. We have experienced a huge surge in applications – 2000 more than any previous year. Over our ten years of operation as a university, our annual enrolment of degree and postgraduate students has increased by 9,000 equivalent full time students – making the largest contribution of any university in New Zealand to opposing the declining participation rates in this decade. AUT's degree and postgraduate enrolment is now greater than that of the Universities of Waikato or Canterbury. The success in employment of AUT graduates ranks well amongst the statistics for the other universities, as does AUT's successful completion results for its students. We have an increasing number of Maori students who are present in equal proportions, and achieve as well as the average, at every level of the curriculum up to and including PhD. We are seeking to engage more Pasifika students and have made huge progress. The development of our Manukau Campus, recently opened, will support this work. What is holding AUT back is the capped funding system that limits our ability to respond to the needs around us.

AUT aims to be the best New Zealand university in all that it does. This is not for our own sake. Universities are often seen as, if not directly accused of, simply pursuing self-aggrandisement and feathering their own nests. That is wrong. Supporting university education is supporting the future functioning of the nation – not supporting a set of arcane establishments of uncertain value in the modern world. AUT University, as others, seeks to be the best at what it does:

- for the sake of every student that studies with it
- for the sake of every employer that takes on an AUT graduate
- for the sake of every industry that seeks innovation and the creative application of ideas from a partner in research, development or training
- for the sake of our society and the national economy that both need professional knowledge, thinking, skills and capabilities in greater quantities
- for the sake of the individuals, families and communities that will look to AUT for the transformative opportunities that access to higher education and advanced knowledge can provide, and
- for the standing of Aotearoa New Zealand in the world, as a country that is educated, fair, rich in culture, rich in understanding, sophisticated in thinking and practice, and able to identify and achieve what it needs for true prosperity. END

ANNEX ONE

The table below is reproduced from page 8 of “OECD Education Statistics, Educational Attainment and Problems Associated with NI Comparisons” *Briefing Paper 11/07*, September 2007, Research and Library Services, Northern Ireland Assembly <http://www.niassembly.gov.uk/io/research/2007/1107.pdf>

Note: These data were prepared for assessment of UK performance against the OECD. There are no consistent measures of educational attainment across the OECD and comparisons are problematic. The UK is part of Europe, and NZ and Australia historically reference to UK educational standards; this table therefore, while differing from a face interpretation of OECD’s *Education at a Glance* data, presents a more useful comparative. On the Table, ‘Upper or post-secondary education (non tertiary)’ which is up to the UK NVQ L4, includes trade qualifications; ‘Tertiary level of education’ includes degrees and higher diplomas.

Table 1. Educational Attainment of Population Aged 25-64 in 2005³

	% with lower secondary level of education or below ⁴	% with upper or post-secondary level of education (non-tertiary)	% with tertiary level of education ⁵
Australia	35	34	31
Austria	19	63	18
Belgium	15	39	46
Canada	15	39	46
Czech Republic	10	77	13
Denmark	17	50	34
Finland	21	44	35
France	33	42	25
Germany	17	58	25
Greece	40	39	21
Hungary	24	60	17
Iceland	31	40	31
Ireland	35	36	29
Italy	49	38	13
Japan	0	60	40
Korea	25	44	32
Luxembourg	28	46	27
Mexico	79	6	15
Netherlands	29	41	31
New Zealand	21	52	27
Norway	22	45	33
Poland	15	69	17
Portugal	74	14	13
Slovak Republic	15	73	13
Spain	51	20	28
Sweden	17	54	30
Switzerland	13	58	29
Turkey	73	17	10
United Kingdom	14	56	30
United States	13	49	38
OECD average	29	45	26

³ Sources: OECD ‘Education at a Glance 2007’; ‘Growing Regions, Growing Europe’ Fourth report on economic and social cohesion, May 2007, Eurostat. See Annex C for OECD classifications.

⁴ i.e. NVQ level 1 (1-4 GCSE grades A-C) or less

⁵ i.e. NVQ level 4 and above